

AMENDMENTS TO THE CLAIMS

Listing Of Claims

Claims 1-24 (canceled)

25. (currently amended) A semiconductor component comprising:

a substrate;

~~having a chip scale surface;~~

a conductive layer on the ~~surface~~ substrate;

a plurality of conductors ~~on the surface~~ comprising first portions of the conductive layer configured for electrical transmission separated from one another by second portions of the conductive layer configured for no electrical transmission;

a plurality of grooves through the conductive layer to the ~~surface~~ substrate configured to define a shape and a spacing of each conductor, each groove having a micron sized width such that the conductors and the second portions substantially cover the ~~surface~~ substrate; and

at least one semiconductor die on the ~~substrate~~ conductive layer in electrical communication with the conductors.

26. (previously presented) The semiconductor component of claim 25 wherein the width for each groove is equal.

27. (previously presented) The semiconductor component of claim 25 wherein the width for each groove is about 5 μm .

28. (currently amended) The semiconductor component of claim 25 wherein the conductors include a plurality of pads defined by the grooves and the at least one

semiconductor die comprises a plurality of bumps flip chip bonded to the pads.

29. (previously presented) The semiconductor component of claim 25 wherein a thickness of the conductive layer and the width are selected to facilitate laser machining of the grooves.

30. (currently amended) A semiconductor component comprising:

a substrate;
~~having a surface;~~

a conductive layer comprising a metal ~~on~~ substantially covering the surface substrate;
~~having a selected thickness;~~

a plurality of conductors ~~on the surface~~ comprising portions of the conductive layer configured for electrical transmission, the conductors separated from one another by remaining portions of the conductive layer configured for no electrical transmission;

a plurality of grooves through the conductive layer to the ~~surface~~ substrate, the grooves defining a size and a shape of each conductor and each remaining portion, each groove having a ~~same~~ micron sized width; and

at least one semiconductor die on the conductive layer flip chip mounted to the ~~substrate in electrical communication with the~~ conductors.

31. (previously presented) The semiconductor component of claim 30 wherein the width is about 5 μm .

32. (currently amended) The semiconductor component of claim 30 further comprising a plurality of conductive vias in the substrate in electrical communication with the conductors and with a plurality of contact balls on ~~a second surface of~~ the substrate.

33. (previously presented) The semiconductor component of claim 30 wherein the component comprises a chip module, a multi chip module or a package.

34. (currently amended) The semiconductor component of claim 30 further comprising an encapsulant ~~at least partially~~ covering the semiconductor die , the conductive layer, the conductors and the grooves.
~~and at least a portion of the surface.~~

35. (currently amended) A semiconductor component comprising:

a substrate;
~~having a surface;~~

a conductive layer ~~on~~ substantially covering the ~~surface~~ substrate;

a plurality of conductors ~~on the surface~~ comprising first portions of the conductive layer configured for electrical transmission;

a plurality of grooves in the conductive layer defining and electrically isolating the conductors, each groove having a same micron sized width;

a plurality of second portions of the conductive layer defined by the grooves and configured to separate the conductors without electrical transmission therethrough;
and

a semiconductor die on the ~~substrate~~ conductive layer in electrical communication with the conductors.

36. (previously presented) The semiconductor component of claim 35 wherein the component comprises a chip module, a multi chip module or a package.

37. (currently amended) The semiconductor component of claim 35 further comprising an encapsulant ~~at least~~

~~partially~~ covering the semiconductor die , the conductive layer, the conductors and the grooves.
~~and at least a portion of the surface.~~

38. (previously presented) The semiconductor component of claim 35 wherein a thickness of the conductive layer and the width are selected to facilitate laser machining of the grooves.

39. (previously presented) The semiconductor component of claim 35 wherein the width is about 5 μm .

Claims 40-46 (canceled)

47. (currently amended) A semiconductor component comprising:

a substrate; ~~having a surface;~~

a conductive layer substantially covering ~~on the surface~~ substrate;

a plurality of conductors ~~on the surface~~ comprising portions of the conductive layer configured for electrical transmission;

a plurality of grooves in the conductive layer electrically isolating the conductors, each conductor having opposing edges defined by a pair of grooves and remaining portions of the conductive layer on either side separated from the opposing edges by the pair of grooves, each groove having a same micron sized width ~~of about 5 μm ;~~
and

at least one semiconductor die on the ~~substrate~~ conductive layer flip chip mounted to ~~in electrical communication with~~ the conductors.

48. (previously presented) The semiconductor component of claim 47 wherein a thickness of the conductive layer and a size and a spacing of the conductors are

selected to provide a desired impedance value for the conductors.

49. (currently amended) The semiconductor component of claim 47 wherein each conductor has a ~~second~~ width of about 5 μm .

50. (previously presented) The semiconductor component of claim 47 wherein a thickness of the conductive layer ~~and the width are~~ is selected to facilitate laser machining of the grooves.

51. (previously presented) The semiconductor component of claim 47 wherein the conductive layer includes an opening for attaching the die directly to the substrate.

52. (currently amended) A semiconductor component comprising:

a substrate;
~~having a surface;~~

a conductive layer substantially covering the substrate;
~~on the surface;~~

a plurality of conductors on the ~~surface~~ substrate having a size, a spacing, and a shape defined by a plurality of grooves through the conductive layer, each conductor comprising a first portion of the conductive layer configured for electrical transmission separated from an adjacent conductor by a groove and a second portion of the conductive layer which is not configured for electrical transmission, each groove having a same micron sized width;

a plurality of conductive vias through the substrate in electrical communication with the conductors; and

a semiconductor die on the ~~substrate~~ conductive layer in electrical communication with the conductors.

53. (previously presented) The semiconductor component of claim 52 wherein the width is about 5 μm .